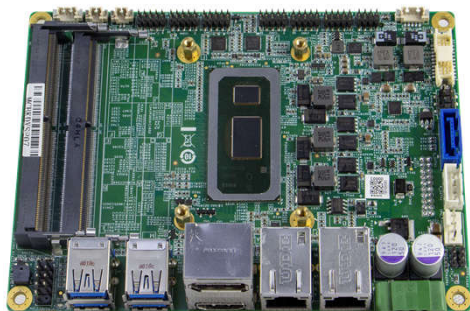


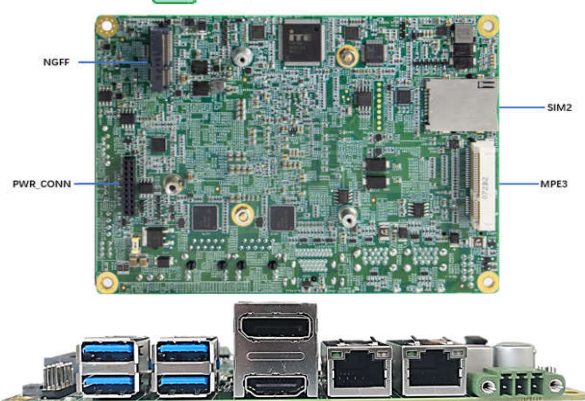
3.5" Embedded Single Board Computer

ECM-I910

Intel® Whiskey lake U CPU, Dual Channel DDR4, 1*HDMI, 1*eDP, 1*DP, 2*LAN, 4*USB3.1, 4*COM, 1*8-bit GPIO, 1*M.2 E-key, 1*Full size mini PCIe, DC 12V.

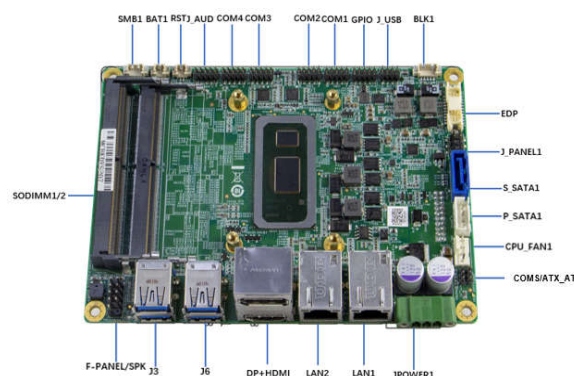


RoHS
CE FCC



Key Features

- 8th Generation Intel® Core/Celeron U-series processor
- Dual channel DDR4 SODIMM, support 2400MHz up to 32GB
- 1*HDMI, 1*eDP, 1*DP, three independent 4K display interfaces
- 2*GbE LAN, Gig. Ethernet10/100/1000Mbps self-adaptive
- 4*USB3.1, 2*USB2.0, 4*COM, 1*8-bit GPIO
- 1*M.2 2230 E-Key; 1*full size Mini PCIe, default PCIe singal, mSATA signal selection can be realized through BIOS, with SIM card slot, support 4G LTE/ WIFI /BT
- 1*SATA3.0 HDD/SSD, 1*mSATA(Opt.) for storage
- Optional support for TPM2.0, DC IN 12V, 9-36V wide power input for optional
- Compact size, complete function, easy to customize for embedded system applications



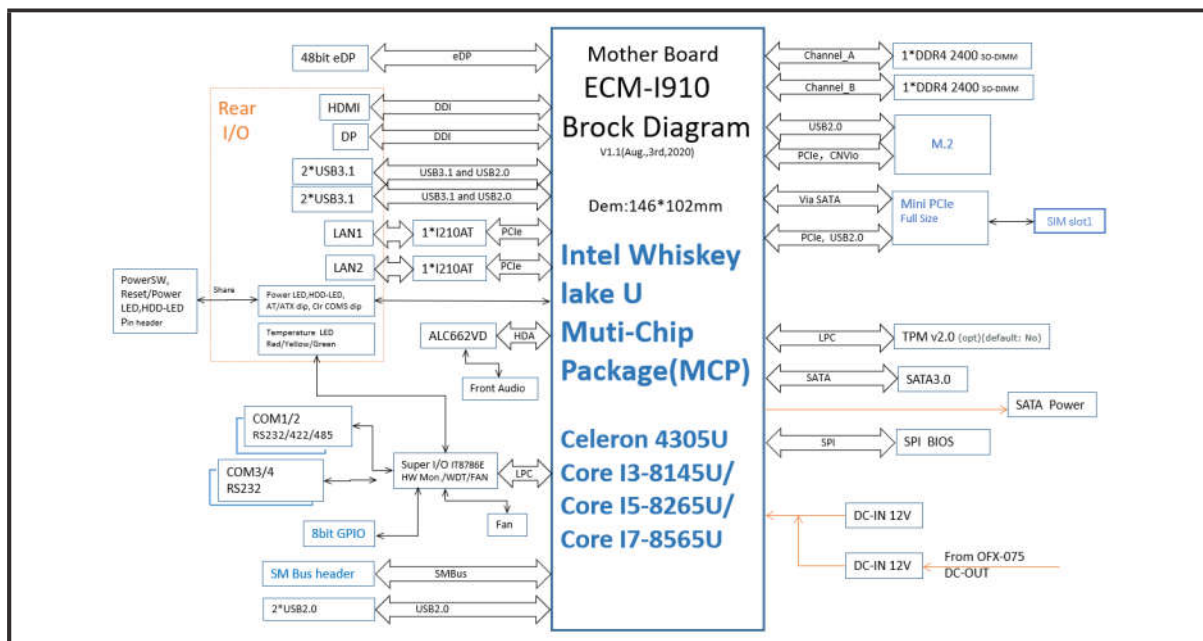
SPEC.

system	CPU	CPU	Celeron 4305U	Core I3-8145U	Core I5-8265U	Core I7-8565U
		Cores	2	2	4	4
		Threads	2	4	8	8
		Frequency(GHz)	2.2	2.1-3.9	1.6-3.9	1.8-4.6
	System Memory	Dual Channel DDR4 SODIMM, support 2400MHz, max.32GB				
	Expansion	1*M.2 2230 E-Key, support WiFi6(1000M bandwidth), support WiFi/BT5.0; 1*full size Mini PCIe, default PCIe singal, mSATA signal selection can be realized through BIOS, with SIM card slot, support 4G LTE				
	Graphics	Intel® Gen.9 UHD Graphics, support 3 independent 4K display, DirectX 12, HEVC/H265 HW HD codec, the highest dynamic frequency up to 1.2GHz; HDMI: up to 4096*2304@24Hz DP: up to 4096*2304@60Hz eDP up to 4096x2304@60Hz;				
	Audio	Realtek ALC662VD controller, Line out & Mic in, Support 5.1 channel				
	LAN	2*Intel® I210AT PCIe Gig. Ethernet, 10/100/1000Mbps self-adaptive				
	Storage	1*SATA 3.0 HDD/SSD, 1*mSATA(Opt.)				
	Front I/O	4*USB3.1gen2.0 TYPE A, support up to 10G bit/S transmission speed 1*HDMI 1.4, 1*DP 1.2; 2*GbE LAN(RJ45) 1*Mic in&Line out (Phone jack)				
	Internal I/O	2*USB2.0 header, 2* RS232/422/485 header, 2*RS232 header, 1*8-bit GPIO header; 1*eDP connector, 1*fan connector; 1*front audio (wafer) ; 1*SATA3.0				
	Switch	1*power SW, 1*RST SW; 1*AT/ATX SW; 1*Clear CMOS SW				
	LED	1*Power LED; 1*HDD LED; 3*CPU Temp.LED(Red is warning, Yellow is high, Green is normal)				
	Power Supply	DC 12V, (It can be connected to OFX-075 75W power board and supports 9-36V wide voltage input) TDP: 19.92W (I5-8265U, 8GB DDR, 1*500G SSD)				
	Watchdog Timer	Watchdog timeout programmable via software 1 to 255 second				
	OS Support	Windows 10*IoT enterprise, Andriod, Ubuntu, Suse, Red Hat*enterprise, Wind River Vxworks*7, Yocto				

*All specifications and photos are subject to change without notice.

Mechanical & Environmental	Dimension	(W*H): 146*102mm
	Operating Temperature	0°C~60°C
	Storage Temperature	-40°C~85°C
	Storage Humidity	10~90%@40°C, Non-condensing
	Certification/EMC	CE & FCC CLASS B

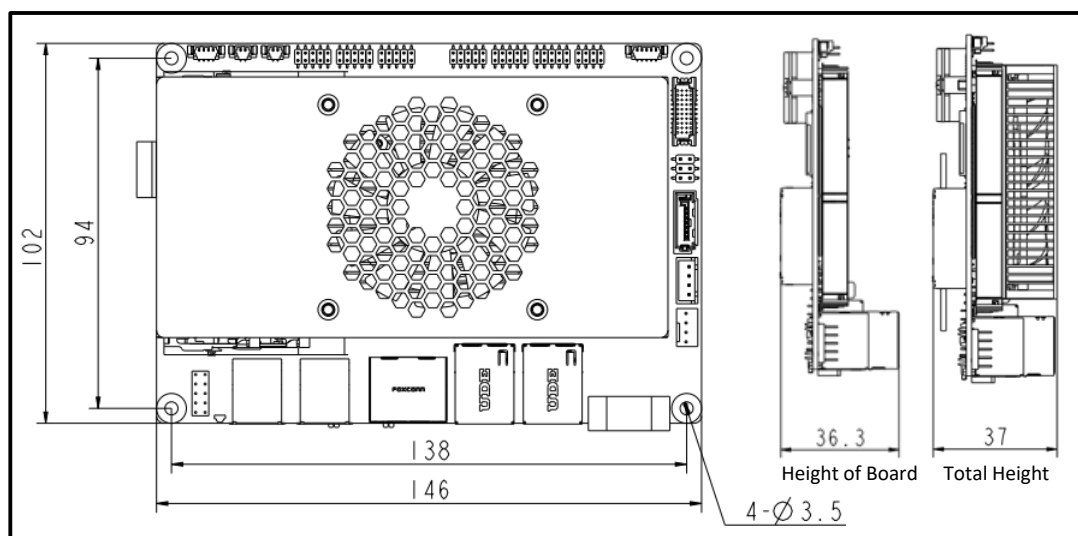
Block Diagram



Dimension

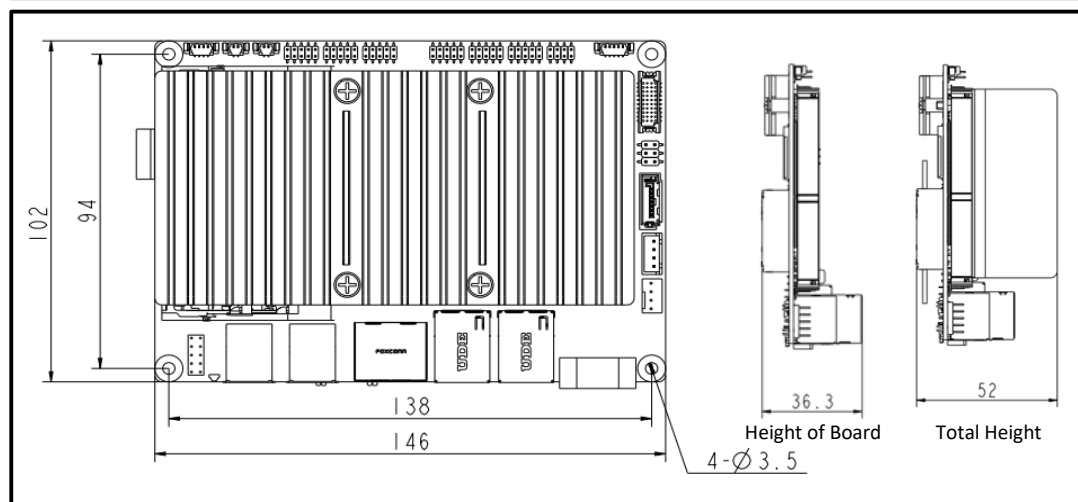
Radiator with Fan

Unit:mm



Fanless Radiator

Unit:mm



Ordering Info.

Model No.	Introduction
ECM-I910/S001	3.5" Embedded Single Board Computer, Intel® Core I3-8145U, 2*SODIMM DDR4, 2*LAN, 4*USB3.1, 2*USB2.0, 1*M.2 2230 E-Key, 1* Full size mini PCIe, 4*COM, 1*DP, 1*HDMI, 1*eDP, Mic & Line out, 1*SATA3.0, DC 12V
ECM-I910/S002	3.5" Embedded Single Board Computer, Intel® Core I5-8265U, 2*SODIMM DDR4, 2*LAN, 4*USB3.1, 2*USB2.0, 1*M.2 2230 E-Key, 1* Full size mini PCIe, 4*COM, 1*DP, 1*HDMI, 1*eDP, Mic & Line out, 1*SATA3.0, DC 12V
ECM-I910/S003	3.5" Embedded Single Board Computer, Intel® Core I7-8565U, 2*SODIMM DDR4, 2*LAN, 4*USB3.1, 2*USB2.0, 1*M.2 2230 E-Key, 1* Full size mini PCIe, 4*COM, 1*DP, 1*HDMI, 1*eDP, Mic & Line out, 1*SATA3.0, DC 12V
ECM-I910/S004	3.5" Embedded Single Board Computer, Intel® Celeron 4305U, 2*SODIMM DDR4, 2*LAN, 4*USB3.1, 2*USB2.0, 1*M.2 2230 E-Key, 1* Full size mini PCIe, 4*COM, 1*DP, 1*HDMI, 1*eDP, Mic & Line out, 1*SATA3.0, DC 12V
OFX-075	75W power board, support DC IN 9-36V, DC OUT 12V, 38*53mm, power consumption minimum54W, max78W

Optional accessory pack

Accessories	Introduction
Fan radiator	Pure copper+Aluminium alloy heat radiator, four-wire intelligent temperature control ball-bearing fan, silent ultra-thin design, fan cable 100mm, size: 137*70*24.2mm (After installation, the total thickness of the motherboard is 37mm)
Fanless radiator	Pure copper+Aluminium alloy heat radiator, size: 137*70*39.3mm (After installation, the total thickness of the motherboard is 52mm)

Cable package

Calbe	Introduction
Serial ports cable kit	1-to-4 serial ports cable kit 300mm
SATA Cable	1*SATA Cable with SATA power cable, 300mm